Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_

**Notes Questions for the Unit 3, Part 2 Notes – Ecosystems**

Mrs. Krouse, AP Biology, 2015-2016

***Vocabulary:*** *For each of the terms listed below, fill in the definition given in the notes in the second column. In the third column, I may provide you with a memory trick and/or ask you to break down a term into its parts to better understand its meaning.*

|  |  |  |
| --- | --- | --- |
| **Vocabulary Term and Synonyms** | **Definition(s) Given in the Notes** | **Memory Trick and / or** **Breaking down the Word** |
| Ecology |  | You don’t need to fill in this column for this term ☺ |
| Ecological Succession |  | **Breaking Down the Word:** Look up the meaning of “succession.” How does this help clarify the meaning of this term? |
| Primary Succession |  | **Breaking Down the Word:** How does “primary” help clarify the meaning of this term? |
| Secondary Succession |  | **Breaking Down the Word:** How does “secondary” help clarify the meaning of this term? |
| Pioneer Species |  | **Breaking Down the Word:** How does “pioneer” help clarify the meaning of this term? |
| Climax Community |  | **Breaking Down the Word:** How does “climax” help clarify the meaning of this term? |
| First Law of Thermodynamics (aka Principle of Conservation of Energy) |  | You don’t need to fill in this column for this term ☺ |
| The Second Law of Thermodynamics |  | You don’t need to fill in this column for this term ☺ |
| Endothermy |  | **Breaking Down the Word:** Look up the meaning of “endo.” How does this help clarify the meaning of this term? |
| Ectothermy |  | **Breaking Down the Word:** Look up the meaning of “ecto.” How does this help clarify the meaning of this term? |
| Invasive Species |  | You don’t need to fill in this column for this term ☺ |

***Practice Questions:*** *Answer the following questions thoroughly and accurately in complete sentences.*

1. Provide an example of an abiotic factor that could affect living organisms.
2. Provide an example of a biotic factor that could affect living organisms.
3. Explain the relationship between the following terms: organism, population, community, ecosystem, and biosphere.
4. Provide an example of an energy “transformation” that occurs in living organisms. (Hint: Look in the section about the First Law of Thermodynamics.)
5. Explain how living organisms DO NOT violate the Second Law of Thermodynamics.
6. Explain how the body’s temperature regulation system is an example of negative feedback.
7. Explain how the reproductive strategy of biennial plants is related to energy availability.
8. Why do smaller endotherms (ex: mice) tend to have a higher metabolic rate than larger endotherms (ex: elephants)?
9. Describe one example of a human activity, geological event, or meteorological event that has a major effect on ecosystems.